



INDUSTRIAL WASTE SITE IDENTIFICATION STUDY

PRELIMINARY FIELD INVESTIGATIONS

JANUARY, 1981

TD
897.5
I53
1981



Ontario

Ministry
of the
Environment

The Honourable
Harry C. Parrott, D.D.S.,
Minister

Graham W. S. Scott, Q.C.,
Deputy Minister

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INDUSTRIAL WASTE SITE IDENTIFICATION STUDY

Preliminary Field Investigations

January, 1981

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1981

TABLE OF CONTENTS

1. Introduction
2. Figure 1 "Summary of Findings"
3. Figure 2 "Summary of Recommendations"
4. Appendix A "Inventory of Sites"
5. Appendix B "Synopsis of Recommendation"
6. Appendix C "Terms of Reference"

INDUSTRIAL WASTE SITE IDENTIFICATION STUDY

Preliminary Field Investigations

Introduction

In 1979 a Site Inventory Study was undertaken to locate and identify old historic sites that were used and closed prior to 1971 when this Ministry began keeping records. The inventory was carried out by university researchers who sought out information and data from existing records and through field discussions with people who had been involved or had knowledge of waste management activities in the past years.

Recognizing that the Site Inventory Study would not identify locations used by an industry for its own waste, Ministry Regional staff compiled an inventory of such sites, which are listed in Appendix A "Inventory of Sites". In compiling the list sufficient flexibility was given to allow the inclusion of other sites, some still operating, which the Regions considered should also be investigated.

In October, 1980 the services of four consulting engineering firms were retained by the Ministry to determine if problems did exist at the sites identified in Appendix A. The two major concerns of this Ministry relate to the possible production of gas and leachate as a result of the waste undergoing chemical and/or biological change over a period of time. As a result the terms of reference were developed requiring the consultant to investigate and determine the presence of gas and/or leachate, and to identify impacts from their presence. The findings and recommendations are in Figures 1 and 2 respectively, and the

results are summarized by site in Appendix B. If further information is required, the consultants' reports complete with data sheets, aerial photographs, maps and detailed results of field measurements are available for review during office hours at MOE regional and head offices.

In all cases where the consultant identified an apparent problem, whether gas or water quality, the property owners, tenants, or persons in charge were notified. The owners or persons in charge of the sites, as well as the municipality in which the site was located, were each provided with the detailed results of the consultant's investigation.

The fact that gas was detected at a number of sites is not, by itself, significant. The movement of gas from a site to surrounding structures and the possible ensuing build-up in closed and confined areas is the prime concern. Similarly, some elevation in chlorides, for instance, or changes in other parameters such as pH, alkalinity or dissolved solids do not constitute a hazard or problem but do indicate that some source is impacting on water quality and further monitoring may be warranted.

It should be emphasized that the preliminary field studies were undertaken in an attempt to identify problems and not to quantify the extent of possible impairment. Additional studies carried out by technically competent personnel will be required before detailed remedial

measures, where required, are engineered and implemented.

Ministry will provide technical support.

FIGURE 1

SUMMARY OF FINDINGS

January, 1981

| REGION/LOCATION | 1 No. of sites (Active) | 2 No evidence of gas | 3 No evidence of leachate | 4 Evidence of gas | 5 Evidence of leachate | 6 Evidence of gas in structures | 7 Waste unstable | 8 Access to site uncontrolled | CONSULTANT REPORTING |
|--------------------------------|----------------------------------|----------------------------|---------------------------------|-------------------------|------------------------------|--|------------------------|--|-----------------------------|
| Southeastern (Kingston) | 7 (3) | 4 | 2 | 3 | 5 | 0 | 0 | 0 | Water & Earth Sciences |
| Central (Don Mills/Toronto) | 16 (4) | 11 | 7 | 5 | 9 | 0 | 3 | 3 | Gartner Lee Associates Ltd. |
| West-Central (Stoney Creek) | 25 (6) | 17 | 15 | 8 | 10 | 0 | 0 | 4 | Monenco |
| Southwestern (London) | 4 | 2 | 1 | 2 | 3 | 0 | 0 | 3 | Proctor & Redfern |
| TOTAL | 52 (13) | 34 | 25 | 18 | 27 | 0 | 3 | 10 | |

FIGURE 2
SUMMARY OF RECOMMENDATIONS
 January, 1981

| REGION/LOCATION | 1 No Further Action Required | 2 Access Requires Control | 3 Further Monitoring Recommended | 4 Further Study Recommended | 5 Impact Identified | 6 Other | CONSULTANT REPORTING |
|--------------------------------|---------------------------------------|------------------------------------|---|--------------------------------------|---------------------------|------------|-----------------------------|
| Southeastern (Kingston) | 2 | 0 | 3 | 4 | 1 | 0 | Water & Earth Sciences |
| Central (Don Mills/Toronto) | 0 | 3 | 9 | 9 | 7 | 2 | Gartner Lee Associates Ltd. |
| West-Central (Stoney Creek) | 7 | 4 | 3 | 12 | 1 | 5 | Monenco |
| Southwestern (London) | 0 | 3 | 3 | 2 | 2 | 1 | Proctor & Redfern |
| TOTAL | 9 | 10 | 18 | 27 | 11 | 8 | |

APPENDIX A

Inventory of Sites

SOUTHEASTERN REGION

PRIVATELY OWNED ON-SITE CHEMICAL

DISPOSAL FACILITIES

| <u>Company</u> | <u>Location</u> | <u>Status</u> |
|--------------------------|-------------------------------------|---------------------------------------|
| Bakelite Thermosets | Belleville | Closed |
| E. MacDougall | Elizabethtown | Open for Septic Waste |
| H. Campbell & Sons | Lyn | Open for Septic Waste |
| Metada Limited | Rideau Road Gloucester Twp. | Closed |
| H. M. Grant | Lot 5. Conc. VI Gloucester Twp. | Closed |
| Gloucester Sand & Gravel | Lot 26. Conc. IV Gloucester Twp. | Open for dry Construction Waste |
| Courtaulds Canada Ltd. | Montreal Road Cornwall | Closed |

Regional Co-ordinator:

Cornwall Office
2nd floor,
4 Montreal Road
Cornwall, Ontario
Mr. Ray Amell

Contractor:

Water & Earth Science
Associates Limited, Ottawa
in association with
Gore and Storrie Ltd., Ottawa

CENTRAL REGION

PRIVATELY OWNED ON-SITE CHEMICAL
DISPOSAL FACILITIES

| <u>Company</u> | <u>Location</u> | <u>Status</u> |
|------------------------------------|-----------------|---------------|
| Union Carbide | Oakville | Closed |
| Dufferin Construction | Oakville | Closed |
| Rockwell International | Milton | Closed |
| Beardmore Tannery | Halton Hills | Open |
| Canada Printing Ink | Burlington | Closed |
| DHI Limited | Mississauga | Closed |
| Corning Glass | Bracebridge | Closed |
| Courtice Auto Wreckers | Courtice | Closed |
| Gravel Pits, Lots 28&29 Conc. 3 | Newcastle | Closed |
| General Motors | Oshawa | Closed |
| Robson Lang Tannery | Oshawa | Closed |
| Canadian Johns Manville | Scarborough | Open |
| Rohm & Haas Limited | Scarborough | Closed |
| Valley Road Landfill | Ajax | Closed |
| Eric Pauze Construction Ltd. | Tiny Township | Open |

Regional Co-ordinator:

Barrie Office
12 Fairview Road
Barrie, Ontario
Mr. Ian Gray

Contractor:

Gartner Lee Associates Limited
Markham
in association with
M. M. Dillon Limited, Toronto

WEST CENTRAL REGION

PRIVATELY OWNED ON-SITE CHEMICAL
DISPOSAL FACILITIES

| <u>Company</u> | <u>Location</u> | <u>Status</u> |
|------------------------|------------------|---------------|
| R. Brown Farm | Ancaster | Closed |
| Cyanamid Canada | Welland | Open |
| Shawinigan Chemical | St. Catharines | Closed |
| General Motors of Can | St. Catharines | Closed |
| Beaver Wood Fibre | Thorold | Open |
| Norton Company | Niagara Falls | Closed |
| Canadian Carborundum | Thorold | Open |
| Niagara Metals | Niagara Falls | Open |
| Cyanamid Canada | Niagara Falls | Closed |
| Fleet Industries | Fort Erie | Closed |
| Coniagas Reduction | Thorold | Closed |
| Domtar Fine Papers | St. Catharines | Closed |
| Stelco | Welland | Open |
| Welland Iron and Brass | Welland | Closed |
| Butler Metal | Cambridge | Closed |
| Dominion Tack & Nail | Cambridge | Closed |
| Telephone City Gravel | Twp. of Puslinch | Closed |
| D. McDonald Farm | Twp. of Puslinch | Closed |
| Prov. Of Ontario | Cambridge | Closed |
| Road 32 Holdings | Cambridge | Closed |
| Peplow Transport | Guelph | Closed |
| Peplow Transport | Twp. of Nichol | Closed |

| <u>Company</u> | <u>Location</u> | <u>Status</u> |
|----------------|---------------------|----------------------|
| Bell Thread | Arthur | Closed |
| Allen Bradley | Cambridge | Closed |
| H. Main Farm | Twp. of Flamborough | Septic Waste Only |

Regional Co-ordinator:

Stoney Creek Office
140 Centennial Parkway North
Stoney Creek, Ontario
Mr. Ray Stewart

Contractor:

Monenco Ontario Limited
2 St. Clair Avenue East
Toronto, Ontario

SOUTHWESTERN REGION

PRIVATELY OWNED ON-SITE CHEMICAL

DISPOSAL FACILITIES

| <u>Company</u> | <u>Location</u> | <u>Status</u> |
|-----------------------|-----------------------------------|---------------|
| River Road Site | Twp. of London | Closed |
| Welland Chemical Ltd. | Sarnia Indian Reserve | Closed |
| Sarnia Landfill | Michigan Ave. | Closed |
| Barney's Pit | Reese's Corners, Plympton Twp. | Closed |

Regional Co-ordinator

London Office
985 Adelaide St. S.
London, Ontario
Mr. Jim McRorie

Contractor

The Proctor & Redfern Group
Toronto
in association with
Gartner Lee Associates Limited
Markham

APPENDIX B

Synopsis of Recommendation

SYNOPSIS OF RECOMMENDATION

January, 1981

REGION: Southeastern

CONSULTANT: Water & Earth Science Assoc. Ltd.
Gore & Storrie Limited

| NO. | SITE NAME (COMPANY) | LOCATION (MUNICIPALITY) | 1 | 2 | 3 | 4 | 5 | 6 | REFERENCE |
|-----|------------------------------------|------------------------------|----------------------------------|-------------------------------|-----------------------------------|---------------------------------|----------------------|-------|-----------|
| | | | No Further Action Required | Access Requires Control | Further Monitoring Required | Further Study Recommended | Impact Identified | OTHER | |
| 1 | Bakelite Thermosets Ltd. | Belleville | -- | -- | -- | X | -- | | Section 1 |
| 2 | Howard Campbell & Sons Ltd. | Township of Elizabethtown | X | -- | -- | -- | -- | | Section 2 |
| 3 | Courtaulds (Canada) Limited | Cornwall | -- | -- | X | X | | | Section 3 |
| 4 | Gloucester Sand and Gravel Ltd. | Twp. of Gloucester | -- | -- | X | -- | X | | Section 4 |
| 5 | H.M. Grant Ltd. | Twp. of Gloucester | -- | -- | X | X | -- | | Section 5 |
| 6 | E. MacDougall Ltd. | Twp. of Elizabethtown | -- | -- | -- | X | -- | | Section 6 |

SYNOPSIS OF RECOMMENDATION

January, 1981

REGION: Southeastern

Water & Earth Science Assoc. Ltd.
CONSULTANT: Gore & Storrie Limited (2)

[illegible]

SYNOPSIS OF RECOMMENDATION

January, 1981

REGION: Central

CONSULTANT: Gartner-Lee Associates Ltd.

| NO. | SITE NAME (COMPANY) | LOCATION (MUNICIPALITY) | 1 | 2 | 3 | 4 | 5 | 6 | REFERENCE |
|-----|-----------------------------------|----------------------------|----------------------------------|-------------------------------|-----------------------------------|---------------------------------|----------------------|-------|------------------------|
| | | | No Further Action Required | Access Requires Control | Further Monitoring Required | Further Study Recommended | Impact Identified | OTHER | |
| 8 | Courtice Auto Wreckers | Courtice | -- | -- | X | -- | -- | | p. 9 |
| 9 | Courtice Gravel Pits | Courtice | -- | -- | -- | X | -- | | p. 12 |
| 10 | Robson Lang Tannery | Oshawa | -- | -- | -- | X | X | | p. 14 |
| 11 | Oshawa Harbour Commission Site | Oshawa | -- | X | -- | X | X | | p. 18 |
| 12 | Ajax Sanitary Landfill Site | Ajax | -- | -- | -- | X | -- | | p. 21 |
| 13 | Johns-Manville Canada Inc. | Toronto (East) | -- | -- | X | -- | -- | | p. 24 cont'd .. |

SYNOPSIS OF RECOMMENDATION

January, 1981

REGION: Central

CONSULTANT: Gartner-Lee Associates Ltd. (2)

| NO. | SITE NAME (COMPANY) | LOCATION (MUNICIPALITY) | 1 | 2 | 3 | 4 | 5 | 6 | REFERENCE |
|-----|------------------------------|----------------------------|----------------------------------|-------------------------------|-----------------------------------|---------------------------------|----------------------|-----------------------------------|-----------|
| | | | No Further Action Required | Access Requires Control | Further Monitoring Required | Further Study Recommended | Impact Identified | OTHER | |
| 14 | Rohm & Haas Limited | Toronto (East) | -- | -- | X | -- | -- | | p. 28 |
| 15 | D.H.I. Limited | Streetsville | -- | X | -- | X | X | Lagoon contents removed | p. 31 |
| 16 | Dufferin Const. | Oakville | -- | X | X | -- | -- | | p. 34 |
| 17 | Union Carbide Canada Ltd. | Oakville | -- | -- | -- | X | X | | p. 37 |
| 18 | Canada Printing Ink | Burlington | -- | -- | X | X | X | Contamin- ated soil removed | p. 37 |
| 19 | Rockwell Inter- national | Milton | | -- | X | -- | -- | | p. 46 |

SYNOPSIS OF RECOMMENDATION

January, 1981

REGION: Central

CONSULTANT: Gartner-Lee Associates Ltd. (3)

[illegible]

SYNOPSIS OF RECOMMENDATION

January, 1981

REGION: West-Central

CONSULTANT: Monenco Ontario Limited

| NO. | SITE NAME (COMPANY) | LOCATION (MUNICIPALITY) | 1 | 2 | 3 | 4 | 5 | 6 | REFERENCE |
|-----|-----------------------------|----------------------------|----------------------------------|-------------------------------|-----------------------------------|---------------------------------|----------------------|---|-----------|
| | | | No Further Action Required | Access Requires Control | Further Monitoring Required | Further Study Recommended | Impact Identified | OTHER | |
| 24 | R. Brown Farm | Ancaster | -- | X | -- | X | -- | | Part 1 |
| 25 | Cyanamid Canada Inc. | Welland | -- | -- | X | X | -- | | Part 2 |
| 26 | Shawinigan Chemical Co. | St. Catharines | X | -- | -- | -- | -- | | Part 3 |
| 27 | General Motors of Canada | St. Catharines | X | -- | -- | -- | -- | | Part 4 |
| 28 | Beaver Wood Fibre Co. | Thorold | -- | -- | -- | -- | -- | Sawdust should be eventually removed | Part 5 |
| 29 | Norton Company | Niagara Falls | -- | -- | -- | -- | -- | Prevent runoff to watercourse | Part 6 |

SYNOPSIS OF RECOMMENDATION

January, 1981

REGION: West-Central

CONSULTANT: Monenco Ontario Limited (2)

| NO. | SITE NAME (COMPANY) | LOCATION (MUNICIPALITY) | 1 | 2 | 3 | 4 | 5 | 6 | REFERENCE |
|-----|-------------------------------|----------------------------|----------------------------------|-------------------------------|-----------------------------------|---------------------------------|----------------------|-------|-----------|
| | | | No Further Action Required | Access Requires Control | Further Monitoring Required | Further Study Recommended | Impact Identified | OTHER | |
| 30 | Canadian Carborundum Co. | Niagara Falls | X | -- | -- | -- | -- | | Part 7 |
| 31 | Niagara Metals | Niagara Falls | -- | -- | -- | X | -- | | Part 8 |
| 32 | Cyanamid Canada Inc. | Niagara Falls | -- | -- | X | X | X | | Part 9 |
| 33 | Fleet Industries Ltd. | Fort Erie | -- | -- | -- | X | -- | | Part 10 |
| 34 | Coniagas Reduction Company | Thorold | -- | -- | X | X | -- | | Part 11 |
| 35 | Domtar Fine Papers Ltd. | St. Catharines | -- | X | — | — | — | | Part 12 |

SYNOPSIS OF RECOMMENDATION

January, 1981

REGION: West-Central

CONSULTANT: Monenco Ontario Limited (3)

| NO. | SITE NAME (COMPANY) | LOCATION (MUNICIPALITY) | 1 | 2 | 3 | 4 | 5 | 6 | REFERENCE |
|-----|--|----------------------------|----------------------------------|-------------------------------|-----------------------------------|---------------------------------|----------------------|--|-----------|
| | | | No Further Action Required | Access Requires Control | Further Monitoring Required | Further Study Recommended | Impact Identified | OTHER | |
| 36 | Stelco Inc. (Welland Tube Works) | Welland | -- | -- | -- | -- | -- | Maintain buffer zone bet- ween wastes & creek | Part 13 |
| 37 | Welland Iron and Brass Ltd. | Welland | -- | -- | -- | -- | -- | Post methane hazard | Part 14 |
| 38 | Butler Metal Products Co. Ltd. | Cambridge | -- | -- | -- | X | -- | | Part 15 |
| 39 | Dominion Tack and Nail Ltd. | Cambridge | X | -- | -- | -- | -- | | Part 16 |
| 40 | Telephone City Gravel Ltd. | Cambridge | -- | -- | -- | X | -- | | Part 17 |
| 41 | D. McDonald Farm | Twp. of Puslinch | -- | X | -- | X | -- | | Part 18 |

SYNOPSIS OF RECOMMENDATION

January, 1981

REGION: West-Central

CONSULTANT: Monenco Ontario Limited (4)

| NO. | SITE NAME (COMPANY) | LOCATION (MUNICIPALITY) | 1 | 2 | 3 | 4 | 5 | 6 | REFERENCE |
|-----|-----------------------------|----------------------------|----------------------------------|-------------------------------|-----------------------------------|---------------------------------|----------------------|-------|-----------|
| | | | No Further Action Required | Access Requires Control | Further Monitoring Required | Further Study Recommended | Impact Identified | OTHER | |
| 42 | Province of Ontario | Cambridge | -- | -- | -- | X | -- | | Part 19 |
| 43 | Road 32 Holdings Ltd. | Twp. of Guelph | -- | -- | -- | X | -- | | Part 20 |
| 44 | Peplow Transport | Guelph | -- | X | -- | X | -- | | Part 21 |
| 45 | Peplow Transport | Twp. of Nichol | X | -- | -- | -- | -- | | Part 22 |
| 46 | Bell Thread Company Ltd. | Twp. of Arthur | X | -- | -- | -- | -- | | Part 23 |
| 47 | Allen Bradley Company | Cambridge | X | -- | -- | -- | -- | | Part 24 |

SYNOPSIS OF RECOMMENDATION

January, 1981

REGION: West-Central

CONSULTANT: Monenco Ontario Limited (5)

[illegible]

SYNOPSIS OF RECOMMENDATION

January, 1981

REGION: Southwestern

CONSULTANT: The Proctor & Redfern Group
Gartner Lee Associates Ltd.

[illegible]

APPENDIX C

Terms of Reference

August 20, 1980

TERMS OF REFERENCE FOR
INDUSTRIAL WASTE SITE IDENTIFICATION STUDY,
PART I, SITE INVESTIGATIONS

PREAMBLE:

In 1979, the Ministry of the Environment, Waste Management Branch carried out a survey of waste disposal sites which were in operation prior to 1971. The purpose of the study was to develop a master list of waste disposal sites to determine potential problems. By its nature, this type of survey did not involve the inclusion of waste disposal sites operated by industry for their manufactured by products.

The Ministry, under a separate terms of reference has initiated Phase II of the study requiring investigation of priority group #1 sites to determine public safety and environmental hazards potential of each site. Paralleling the Phase II study, the Ministry intends under these terms of reference to complete a similar investigation of industrial sites. The site will consist of two parts.

Part I

Will investigate the industrial sites listed to determine the public safety and environmental hazards potential of each. The investigations will be carried out under contract by qualified contractor(s).

Part II

Will involve more detailed investigations of those sites where a potential problem identified in Part I requires such action.

TERMS OF REFERENCE:

Part I

The Contractor shall:

1. Investigate each site in sufficient detail, using indicated parameters, in order to determine whether further intensive studies should be undertaken to ascertain if a hazard exists to public safety or the environment.
2. Sample all surface water streams around the perimeter of the site within 100 metres and test for:
 - (i) chlorides
 - (ii) conductivity
 - (iii) sulphate
 - (iv) alkalinity
 - (v) hardness
 - (vi) pH
 - (vii) TDS/S.S.

Also any additional parameters that would be indicative of the industrial waste deposited at the site.

NOTE: Where sufficient data on background levels are not available, additional tests will be done to enable comparisons between up and down stream samples.

3. Sample all water wells within 100 metres on the landfilling site and test for same parameters as listed in item 2 above. Background levels for the groundwater supply should also be determined.

In addition water well records should be reviewed and sufficient water level measurements made to estimate the water table elevation together with the direction and rate of flow.

For the situation where no wells are located within 100 metres of the site; the contractor shall provide a plan for locating and drilling test wells for collecting

groundwater samples and for determining water table elevations. The plan to be approved by the Steering Committee. The costs associated with this additional work not be included in the contractors bid for the project.

4. Each site shall be tested for the presence of combustible hydrocarbon gases by the construction of one test well (2" D hole) into the waste on the site. Taking into consideration the particular waste disposed of on the site, other appropriate gases will be analyzed for either by field equipment or gas chromatography.

On sites larger than 1 (one) acre where the first well indicated the presence of gas or the nature of the waste would suggest that gas should be present, one additional test well per acre should be constructed at a reasonable distance and analyzed for gas as indicated above. Buildings on or immediately adjacent to the site should be tested for the presence of hydrocarbons or appropriate gases, where the site wastes so indicate such action is warranted.

6. Inspect the general area in and around the site to ascertain if there are any leachate springs. Samples of the leachate should be collected and analyzed for the parameters listed in item 2 above. Further, an estimate of the quantity should be made and the point of discharge indicated.
7. Inspect the general area in and around the site to ascertain if there is any vegetation that has been affected by leachate or gas migration.
8. Where lot and concession numbers are not available, U.T.M. co-ordinates will be provided.

GENERAL:

The contractor will undertake analysis in the field by using portable field testing (kits) equipment and in addition where necessary collect samples for laboratory analysis of parameters indicative of the types of waste disposed. If any of the field indicated parameters suggest that the water quality has been affected, the contractor shall collect two (2) litres of water sample and forward it to a laboratory for confirming analysis. M.O.E. laboratory facilities will not be provided for the contractor. The laboratory shall test the sample for any additional parameters that may be used to compare existing water quality to that of background water quality. Parameters shall be selected in direct association with any dangerous waste which has been identified as being disposed of at the site. The occupant of homes using the water for supply shall be asked to describe any taste or odour problems. The local MOH shall be contacted to determine if any unusual health problems exist in the community.

If danger exists or is imminent, the contractor shall notify the Ministry of the Environment immediately on confirmation of test results.

The contractor shall identify appropriate studies which are considered necessary to develop abatement measures to remove any danger identified in the field investigation.

Project Management

The study will be managed by a joint Steering Committee made up of representatives of M.O.E. Waste Management Branch and the region where the works will be carried out. The consultant will carry out the study under the direction of the joint Steering Committee.

Consultant Proposals

Proposals are invited from consultants or teams of consultants capable of undertaking the study, analyses and

report preparation. The consultant or team of consultants should have expertise in the areas of: -

- Solid waste management practices;
- Surface and groundwater hydrology.

Consultant Proposal Contents

The proposal should include the consultant's interpretation of the requirements of the study, together with description of the approach planned to facilitate carrying out the terms of reference, together with a schedule of tasks and milestones including the time required to complete the survey.

In addition, the consultant should also provide: -

1. A list of key personnel who will be assigned to the project with identification of the areas for which each will be responsible. A resume for each person should be included.
2. A description of team structures and accountabilities;
3. A detailed cost estimate which includes manpower costs by individual or level and the per diem rate;
4. A very brief review of any recent assignments on similar projects.

Time and Cost Estimates

Consultants are to provide cost estimates to the joint Steering Committee for each individual site that will be investigated in the project. A work program detailing the time each site is investigated should be presented. The consultant will immediately notify the regional representative of any changes to the work schedule.

Meetings and Proposals

Weekly progress reports will be provided by the consultants to the joint Steering Committee and meetings will be held at least once per month or as specifically requested.

Six copies of the draft final report shall be provided to the joint Steering Committee, and after authorization of the draft, 20 copies of the final report will be required. The final report will be in a format to be determined by the joint Steering Committee. The report shall identify and provide recommendations for appropriate studies and remedial measures that may be required. Typed copies of Forms I and II attached will be included in the final report.

The final report must be concise and well presented. The final report will be completed at the earliest possible date and in no case later than December 15, 1980. This does NOT include those sites requiring hydrogeological exploratory work. The completion dates in that situation will be on a site by site basis.

The Evaluation of Proposals

Each proposal will be evaluated by the members of the joint Steering Committee based on: -

1. The consultant's understanding of the terms of reference and the scope of the project;
2. The approach suggested to fulfill the terms of reference;
3. The experience, expertise and organization of the consultant or team of consultants assembled;
4. Cost and timing.

If necessary, applicants will be requested to attend an interview conducted by members of the joint Steering Committee. A consultant or team of consultants will be selected to carry out the study consequent to the interviews. (Carried out at M.O.E. Regional Offices.)

The joint Steering Committee reserves the right to reject any or all proposals.